

# State \_ Utah DEPARTMENT OF NATURAL RESOURCES

MICHAEL R. STYLER
Executive Director

**Division of Oil Gas and Mining** 

JOHN R. BAZA
Division Director

June 22, 2007

CERTIFIED RETURN RECEIPT 7004 2510 0004 1824 4554

Mr. Duane Crutchfield, Plant Manager Ash Grove Cement Company P.O. Box 51 Nephi, Utah 84648

Subject: First Review of Notice of Intention to Commence Large Mining Operations, Ash Grove Cement, Navajo Sandstone mine, M/023/095, Task ID# 1794, Juab County, Utah

#### Dear Crutchfield:

The Division has completed a review of the Navajo Sandstone Mine received April 23, 2007. After reviewing the information, the Division has the following comments identified below that must be addressed before tentative approval may be granted.

The comments are listed below under the applicable Minerals Rule heading. Please address only those items requested in the attached technical review. Send replacement pages of the original notice **using redline and strikeout text** and indicate how these are to be incorporated into the current approved plan using Form-MR-REV-att available on the Division's web page. After the notice is determined technically complete you will be asked that you send us two clean copies of the complete plan; one copy will be returned.

The Division requests that submittals are made according to the following format. Notices and changes should be three hole punched, maps folded and placed in a plastic 8 ½ by 11 sleeve, and binders provided for new notices, revisions, applications, or other changes of 30 pages or more (binders need only be provided once). Applications should not be bound.



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If you have any questions in this regard please contact me, Tom Munson, Lynn Kunzler, or Beth Ericksen of the Minerals Staff. If you wish to discuss this review, please contact us at your earliest convenience. Thank you for your cooperation in completing this permitting action. In reply, please refer to file # M/023/095.

Sincerely, Suran M. White

Susan M. White

Mining Program Coordinator Minerals Regulatory Program

SMW:tm:pb Attachment: Review, Form MR-REV-att cc: Sherri Hirst, BLM Fillmore w/review

Ari Menitove, Staff Engineer, EarthFax, <a href="mailto:amenitove@earthfax.com">amenitove@earthfax.com</a>
Josh Nelson, Ash Grove Cement Company, Josh.Nelson@ashgrove.com
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# FIRST REVIEW OF NOTICE OF INTENTION TO COMMENCE LARGE MINING OPERATIONS

Ash Grove Cement Navajo Sandstone

> M/023/095 June 22, 2007

# R647-4-106 - Operation Plan

106.4 Plan description for protecting and redepositing existing soils

Determining the safe location of topsoil stockpiles should include: protection against wind and water erosion, dust generation, unnecessary compaction and contamination by noxious weeds, invasive species or other undesirable materials. Please elaborate on the location designation in the plan for protecting soils. It is shown on Plate 106-1, as a circle, therefore it is assumed it is in the shape of a cone. Identify the quantity of topsoil including the dimensions and geometry of the topsoil stockpile. It should not be higher than what can accommodate the angle of repose. (BE)

In locations where topsoil is less than 6 inches in depth, will the materials below the topsoil layer be collected and the mixed in to the topsoil volume? Dust control: Control the generation of particulate matter and fugitive dust during removal and replacement of soil and other materials. Detail the practices and activities necessary for dust control in the plans. Revegetation of the topsoil will be of the final seed mix? (BE)

Paragraph two references figure 106-3, however, it appears that it should identified as figure 106-2. Please check and if required, make the change referencing this figure 106-2. There is some challenge in being able to identify that the mining will occur parallel to the bedding planes/strike and dip (per operations plan description). If the orientation is skewed, there may be some lost bench crest material while mining that can't be used in the reclamation phase of the operation. Please clarify with more detailed verbiage/illustrations regarding the orientation of the bedding to minimize the potential loss of material due to possible bench crest failure. The materials volume calculations may somewhat be compensated for by reducing the angle of the bench slope as shown on plate 106-1 Proposed Mine Layout (A-C detail). (BE)

Please provide clarification about the mine benches design and the reason the benches are sloped as shown in Plate 106-1 (A-C), and "Conceptual Cross Section of Reclaimed Benched Highwall" and "Slope Geometry Used for Reclaimed Highwall Slope Stability Model." (BE)

Since the most recent depth to groundwater level was taken in 1975, the well site referenced as .4 miles North-northwest of the existing pit would be checked for a more recent groundwater level. Show this location on a site map and determine if more recent data from the well owner can be obtained. (TM)

On page 106-6 there is a statement that "The formerly (sp?) pit is located on the nose of a small ridge and is thus outside of any major drainage. Why is this statement in the plan and what is its significance, if it is not needed please remove it. (TM)

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106.9 Location & size of ore, waste, tailings, ponds, facilities, and water/storage treatment ponds Identify location of temporary facilities such as maintenance locations, office and parking etc. If there are no temporary facilities, please indicate. (BE)

To avoid excess land disturbance, access road considerations should include that vegetation may be cleared only for the essential width necessary for road and associated ditch construction and to serve traffic needs. (BE)

106.10 Define the berm materials and source of the materials. Provide a berm design. Warning signs should be erected and placed where required. (BE)

#### **R647-4-107 - Operation Practices**

107.1 Public safety & welfare

107.1.14	Posting warning signs
	Placement of warning signs in highwall area(s) is suggested.(BE)
107.1.15	Constructing berms, fences, etc. above highwalls
	Any loose material generated from blasting that might migrate toward the
	edge of the highwall, should be removed immediately. (BE)

- 107.2 On page 107-2 or 3 of the mine plan please provide a summary of the storm water calculations, stating the storage volume of the sediment pond, the geometry of the sediment pond including spillway dimensions, the drainage area captured, etc. (TM)
- 107.4 Deleterious material safety stored or removed
  Petroleum products (fuel, lubricants, etc.) are considered deleterious materials. Please
  discuss how fueling and maintenance of equipment will be performed (will there be fuel
  storage on site?) (lk)

#### R647-4-109 Impact Assessment

109.1 Please provide an explanation for a no impact assessment to groundwater. (TM)

# R647-4-110 - Reclamation Plan

110.2 Roads, highwalls, slopes, drainages, pits, etc., reclaimed
Roads left remaining during and after reclamation will require maintenance to minimize
erosion. No blocking or restrictions that impede drainage or adversely affects the road
should occur. (BE)

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Please explain reclamation procedure in the benched area of pit (50-ft benches) or what appears to be a 37 degree angle of repose. Describe the equipment that will be used in this area to handle the reclamation final configuration. Specifically, provide equipment capacity and reach information. (BE)

110.4 Description or treatment/disposition of deleterious or acid forming material See comments under R647-4-107.4. (lk)

#### 110.5 Revegetation planting program

It is suggested that biosolids or composted manure be used to increase organic matter vs. using hay or straw. (the use of hay or straw would also require the use of nitrogen since the microbes that decompose the hay and straw use a significant amount of nitrogen. Also, it is becoming more difficult to obtain 'weed free' hay or straw). (lk)

It is unlikely that the use of the proposed seed mix provided in the NOI will result in a permanent, diverse vegetation community (almost half of the seed is from three aggressive introduced species). Suggested alterations include reducing the grass seed to no more than 1 pound for each species, remove smooth brome, and add Palmer penstemon (0.5 lbs/ac), pacific aster (0.1 lb/ac), lewis flax (0.5 lbs/ac), scarlet globemallow (0.1 lb), Wyoming big sagebrush (0.1 lb/ac), and bitterbrush (1.0 lbs/ac). (lk)

# **R647-4-111 - Reclamation Practices**

#### 111.1 Public safety & welfare

# 1.12 Disposal of trash & debris

An environmentally responsible waste strategy plan should be developed and implemented. Each site is unique and requires individual characterization, with the treatment of waste and debris being no exception. If waste piles are created, they should remain on site for reasonable duration, and disposed of in an environmentally protective manner. Waste piles, should be placed to avoid environmental impacts. If there are recyclable materials, a separate area for the collection of these materials is suggested. Hazardous waste (i.e. combustible or flammable liquids), should be disposed of properly, and not mixed with the landfill waste. Explosive remnant (i.e. empty containers, paper and fiber packing materials) shall be disposed of according to manufacturer's instructions. Implement good house keeping procedures, which may include training employees to manage waste properly. (BE)

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1.14 Posting warning signs

It is suggested that warning signs be placed closer to the reclamation work area as well. These signs should be highly visible, easy to read and easily understood. English/Spanish versions should be considered. Signs that become faded and worn should be replaced. (BE)

- 1.15 Constructing berms/fences above highwalls
  Risk Management: Due to proximity of the publicly maintained road, it is
  suggested that public access be minimized/restricted through installation of gate at
  the mine/public road junction. (BE)
- 111.3 Erosion & sediment control
  Silt Fence is not considered an effective erosion control because of on going maintenance
  and proper installation issues. Please provide justification for its use. (TM)
- 111.7 Highwalls stabilized at 45 degrees or less

  Define the berm materials and source of the materials. Provide berm design parameters and provide additional information regarding status after operations. If the berm is left in place after operations, indicate how they will be incorporated into the overall design. (BE)
- 111.8 Is this area going to be revegetated? If so, describe when the seeding will occur relative to the implementation of the channel. (BE)
- 111.13 Although the reclamation cost analysis provides total surface area information for calculation purposes, please provide specific information that all disturbed areas will be revegetated including roads. (BE)

#### R647-4-113 -Surety

Location Factor determined at 78.2% from RSMeans Site Work and Landscape Cost Data 2007 for Price, Utah. Adjustment multiplier may be applicable is certain instances, however, additional information is required. Please identify and provide the specific influencing factors that contribute to this Index. The influencing factors must have absolute applicability. (BE)

General site clean-up cost of \$2000.00 is low. Please provide justification for this dollar amount. See 111.1. (BE)

Provide the quantity and equipment type(s) requiring mobilization and demobilization. (BE)